

## Acquisition Research

# Under the Microscope: The Evolving Clinical Lab

Identifying buyout opportunities in the clinical laboratory industry in Asia



Darryl Chuan  
Sam Kim  
Gerald Leong

Across Asia - namely **Indonesia, Malaysia and Korea**, the clinical lab industry is **attractive** and we have identified **nine companies** as potential private equity buyout opportunities: (i) **Prodia Clinical Laboratory (Indonesia)**; (ii) **Pramita Clinical Laboratory (Indonesia)**; (iii) **Parahita Clinical Laboratory (Indonesia)**; (iv) **Biotest Clinical Laboratory (Indonesia)**; (v) **BP Healthcare (Malaysia)**; (vi) **Pathlab (Malaysia)**; (vii) **Gribbles Pathology (Malaysia)**; (iix) **Clinipath (Malaysia)**; and (ix) carve out of hospital laboratories including **Baek Hospital (Korea)**.

- Globally, the clinical laboratory industry is **attractive**
  - Stable revenues due to long-term contracts from hospitals/health care providers
  - In 2013, EBITDA margins globally were at 15.4%, significantly higher than the 5-year average of 13.1%
  - Consolidation is taking place in developed markets, enabling for stronger bargaining power against customers and suppliers
- In Asia, the clinical lab industry **becomes more attractive** as the healthcare market becomes more developed. Attractive buyout opportunities exist in key countries such as Indonesia, Malaysia and Korea for different reasons:
  - In Indonesia and Malaysia, the clinical lab industry will become more attractive as the industry evolves towards a centralisation business model of core activities
  - In Korea, the clinical lab industry will become even more attractive as hospitals carve out operations and begin to outsource non-core activities
- The target companies are **scale players** in their respective markets and have the opportunity to realise the benefits of economies of scale as the market evolves
  - The target companies are market share leaders or strong followers with strong financials
  - Each target appears to have strong networks and management capabilities to manage change and to positively influence the pace of regulatory change

**Copycat** deals can be considered in Asia. M&A globally is **quite vibrant** in the clinical lab space with over 731 transactions since 2005 to 2013 mostly in advanced markets. In Asia, there is an opportunity to take a leading position by either **facilitating consolidation or transformation**.

- In Asia, while most private equity activities have focused on India and China, there is an opportunity to lead and close a transaction in the core countries
- Value add can be achieved by focusing on facilitating consolidation in the industry or by focusing on transforming their business models
- **Multiple exit opportunities** exist due to the vibrant activity of strategic players globally who are trying to consolidate and globalise operations and with private equity players who are quite active as well. IPO's can also be considered as the players achieve critical scale

### Acquisition Summary

What we like
• Stable non-cyclical revenues
• High growth with positive growth drivers
• Vibrant use of M&A to achieve strategic goals
• Multiple strategic exit scenarios exist
• Market leaders can be found in the range of mid-cap buyouts
• Moderately high EBITDA margins of 15.4%
• Fairly high consolidation level within the industry at the mature level
• Long term stable contracts and high switching costs with few key hospitals in the independent lab segment
• Careful screening of acquisition candidates by taking a pan-Asian view of opportunities in the industry
• Private equity activity in Asia is light – Opportunity to lead consolidation

What we don't like
• Transformation risks as market matures. Diffuse, central and independent labs are distinct business models
• Regulatory risks as regulatory changes are expected as markets mature
• Uncertain timing and duration of transformation stages
• Over fragmentation and over competition in mature markets like in Indonesia
• Candidates possess or can acquire key competencies to survive in evolving markets
• Lack of strong leadership and capacity for change

## I Global Market Economics and Growth Drivers

**The global clinical lab market is worth US\$162.71b in 2013, and set to grow at a CAGR of 5.8% to 2019**

The global market for clinical laboratory services was worth c. US\$162.71b in 2013, and is expected to reach US\$241.37b in 2019, equating to a CAGR of 5.8%.<sup>1</sup>

The global market is highly oligopolistic in nature with a few major players accounting for more than 50% of the global market share. Some of the market leaders in the industry include Laboratory Corporate of America Holdings, Quest Diagnostics, Sonic Healthcare, Healthscope, Genoptix Medical Laboratory, Labco S.A., Charles River Laboratories, Bio-Reference Laboratories, Spectra Laboratories and Abbot Laboratories.<sup>2</sup> The growth of the industry is mainly driven by the following:

**The industry is driven by rise of preventive/predictive healthcare services, growing developing regions, rise of diseases, and shift in healthcare utilization**

### 1. Rise of Preventive and Predictive Healthcare Services

There is a growing trend of preventive and predictive healthcare services as opposed to treatments. This is the case in almost all countries as the per capita expenditure on healthcare increases. This bodes well for clinical laboratories as the demand for lab testing services will be positively impacted by this trend.

### 2. Growth to come from developing regions

Developing regions will experience the greatest growth in healthcare expenditure, with Asia's healthcare expenditure projected to grow at a CAGR of 8.7% to 2020.

### 3. Rise of Diseases

Increase in the number of cases of infectious, chronic and metabolic diseases have driven the growth of specialty tests. Such tests are not commonly found in hospitals, and hence require specialty clinical laboratories to conduct the tests.

### 4. Shift in healthcare utilization

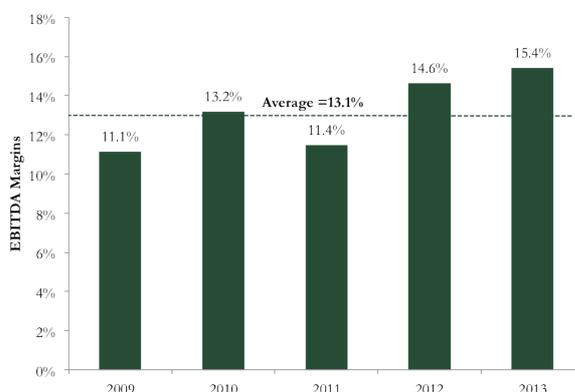
Cost cutting measures in the healthcare industry has shifted healthcare utilisation in favour of laboratories. As hospital stays are shortened, greater emphasis is placed on the role of labs to gather, interpret, and deliver accurate information to physicians. As such, it is expected that there will be an increase in the number of clinical labs, particularly in the independent sector.

**Of the Top 16 clinical lab players, EBITDA and Net Profit margins averaged 15.4% and 4.9% respectively in 2013**

The clinical laboratory industry has demonstrated moderate profitability. Of the top 16 globally listed companies, 2013 EBITDA and Net Profits have averaged 15.4% and 4.9% respectively (Figure 1). Top quartile performers have achieved EBITDA and Net Profit margins north of 17.8% and 10% respectively.

EBITDA Margins have been steadily increasing year on year, with 2013's average of 15.4% representing a 4.3% increase as compared to 2009's average of 11.1%.

**Figure 1. Historical EBITDA Margin of top players**



Source: Bloomberg

<sup>1</sup> <http://www.reuters.com/article/2013/10/18/research-and-markets-idUSnBw185717a+100+BSW20131018>

<sup>2</sup> <http://www.reuters.com/article/2013/10/18/research-and-markets-idUSnBw185717a+100+BSW20131018>

**Asia is projected to grow at 12.8% CAGR to 2018 – twice the rate of the global average**

The healthcare industry in Asia is projected to grow at a rate of c. 12.8% per annum from 2012 to 2018. This represents a growth rate more than twice as fast as the global rate of 6%. Part of this growth is attributed to the large ageing population in Asia, in which the population aged 65 and above is projected to represent 11% of Asia's total population, up from 9.8% in 2012. As a result, 180 million new hospital beds will be needed to meet the growing demand in Asia.<sup>3</sup>

**Asia's market is driven by the rising middle class, ageing population, and shift towards preventive healthcare services**

The growing healthcare industry in Asia is set to have a greatly positive impact on the clinical laboratory segment. This is because 80% of decisions made for diagnosis, prognosis or treatment of diseases and medical conditions are based on the results of clinical laboratory reports, thus there is a positive correlation between the number of medical procedures and the utilisation of clinical laboratories.

The factors driving Asia's clinical laboratory industry are mainly due to the following:

### **1. Rising Middle Class**

Asian middle class spending is expected to grow six times by 2030 to more than US\$45t.

### **2. Ageing Population**

Asia is fast becoming an ageing population, with the number of people aged 65 and above expected to grow from 207 million in 2000 to 857 million in 2050<sup>4</sup>.

### **3. Shift towards preventive and monitoring healthcare services**

There is a growing trend for preventive and predictive healthcare services as opposed to treatments. This is evident in almost all countries as the per capita expenditure on healthcare increases.

**There have been c. 731 deals since 2005, with PE deals making up 28% of all deals**

## **II Global M&A Landscape**

The M&A landscape for clinical laboratories has been vibrant. There have been approximately 731 deals (strategic and PE) in the industry since 2005, with private equity deals making up approximately 28% of these deals. The high level of M&A activity reflects the desire of strategics to consolidate both nationally and globally, while private equity is facilitating this trend as seen in the increased number of PE deals in recent years.

**Private equity deal volume has increased significantly in recent years, while average deal size has decreased, implying that PE players are leading consolidation in the industry**

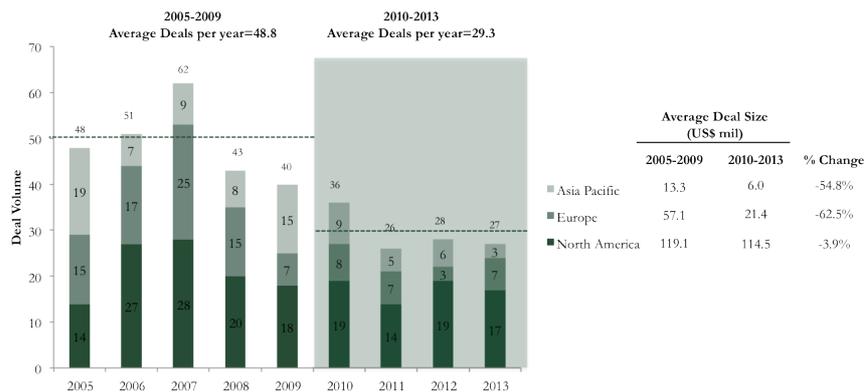
There have been several highly-active strategic buyers in the clinical laboratories market, most notably Sonic Healthcare (Australia), Diagnostics da America (Brazil), Laboratory Corp of America (USA) and Unilabs SA (Switzerland). Of these companies, only Sonic Healthcare has demonstrated an international growth strategy, with acquisitions in North America and Europe, while the remaining three companies have either stayed local or regional in their acquisitions.

There have been c. 203 private equity deals since 2005, with deals in North America encompassing nearly 66% of all deals. Significantly, private equity activity has been increasing in recent years, with the number of deals between 2010 and 2013 averaging 26 a year, as compared to the 18.6 deals per year between 2005 and 2009. Furthermore, average deal sizes have also been decreasing to US\$40m per deal from US\$99m within the same time frames. This decrease in average deal size can be seen across all regions. This suggests that private equity is playing a more significant role in the consolidation of the industry, with a larger number of smaller companies being acquired.

<sup>3</sup> <http://www.frost.com/prod/servlet/press-release.pag?docid=276193296>

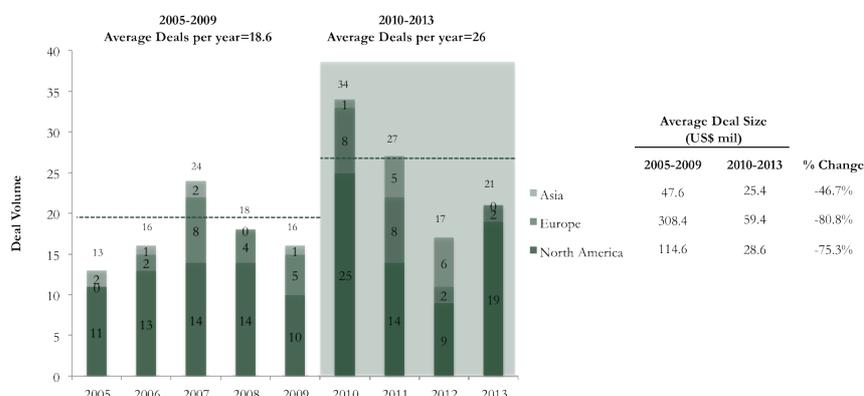
<sup>4</sup> <http://sites.asiasociety.org/asia21summit/wp-content/uploads/2010/11/Asias-Aging-Population-East-West-Center1.pdf>

**Figure 2. Volume and average deal sizes of Strategic deals by year**



Source: Bloomberg, Mergermarket as at December 2013

**Figure 3. Volume and average size of Private Equity deals by year**



Source: Bloomberg, Mergermarket as at December 2013

**Notable private equity deals have occurred in North America and Europe, while Asian PE deals have been most prevalent in India, China and Australia**

One of the largest private equity deals in the industry took place in 2010 in North America when Bridgepoint Advisers bought LGC Group Holdings from LGV Capital for US\$401m. It is one of the few secondary deals in the industry after LGV had made the initial acquisition in 2004. Bridgepoint plans to support LGC's consolidation in the market as it begins to make focused acquisitions to build scale in the UK and internationally.

In 2007, Unilabs SA in Switzerland was acquired by Apax Partners LLP for US\$323m at a valuation of 12.74x EV/EBITDA. The deal allowed Apax Partners to merge Unilabs with its existing portfolio company, Capio AB, and created a leading diagnostics services group across Europe with over 100 laboratories combined.

In Asia Pacific, private equity activity has primarily taken place in India, China and Australia. In 2010, TA Associates acquired Indian-based Dr Lal Pathlabs from Sequoia Capital Operations for a 16% stake worth US\$3m. Along with WestBridge Capital, TA Associates invested a further US\$44m in 2013 to acquire a significant minority stake. TA plans to support Dr Lal Pathlabs' domestic expansion plans to further cement their positioning as one of India's largest diagnostic network.

**33% of deals occurred whereby the target and acquirers were from different countries**

We identified 462 deals by the country of both the target and acquirer. From this data, 67% of these deals were done whereby both target and acquirer were from the same country, while 33% were cross-border deals.

Observable trends for cross border acquisitions include:

1. Geographical expansion – getting a foothold on the local market, typically done strategically based on sub-regions (ie. Western Europe, Southeast Asia)
2. Cross-border selling – Rather than setting up a new facility in a new market, some companies prefer to create synergies with existing local companies to cross-sell their products/services
3. To take advantage of local regulatory environments (ie. French regulations for clinical labs is supporting consolidation, therefore it is more attractive for foreign companies to come in and consolidate)

**Average valuations for clinical laboratory companies appear to be more attractive than the medical services industry as a whole**

Average EV/Sales, EV/EBITDA, and P/E multiples of publicly listed clinical laboratories of 2.4x, 13.4x and 20.7x respectively appear to be more attractive than the medical services industry as whole which is averaging 2.4x, 10.1x and 17.9x respectively.

### III Clinical Laboratory Business Models

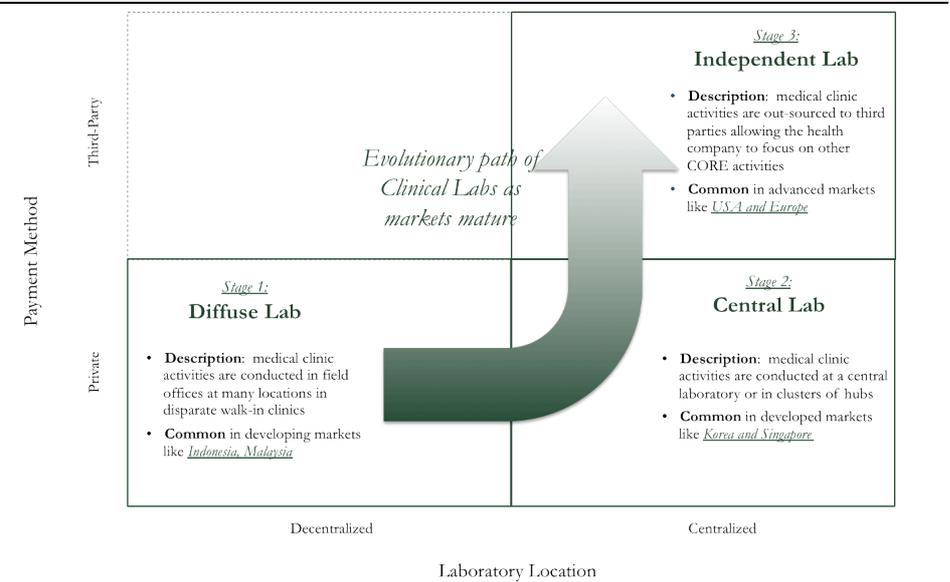
**The clinical laboratory industry have three distinct business models – Diffuse Labs, Central Labs, and Independent Labs**

The market for clinical laboratory services can be segmented into three distinct business models that are prevalent in immature, mature, and advanced markets respectively:

1. Diffuse Labs: Private-payment Decentralized Laboratories
2. Central Labs: Private-payment Centralized Laboratories
3. Independent Labs: Third-party payment Centralized Clinical Laboratories

These distinct business models are illustrated in the 2x2 matrix below (Figure 4). We have identified two factors to distinguish business models, namely the *payment method* to determine whether payments are made by the end patient or by a third party, and secondly whether the laboratory is *centralized* or *decentralized*.

**Figure 4. The Evolution of Clinical Laboratory Business Models**



Source: Houghton Street Partners Analysis

We have determined that the clinical laboratory market goes through different phases of evolution based on the maturity level of a country’s healthcare sector, specifically in terms of its ease of access to healthcare, number of doctors and hospitals, regulatory environment and expenditure levels. It is evident that the clinical laboratory industries in developing nations adopt a private payment decentralized laboratory model, and as the market matures, will then evolve into a private payment centralized model, and

finally to a third-party payment centralized model as it reaches an advanced stage.

The attractiveness of buyout opportunities becomes greater as clinical lab markets reach the independent lab model due to various macro, competitive, and regulatory factors.

### **Stage 1. Private-payment Decentralized Laboratories (Diffuse Lab Model)**

**Most prevalent in developing markets, diffuse labs undertake clinical tests, medical check ups and health screenings for “walk-in” customers**

Most prevalent in developing markets, private-payment decentralized clinical laboratories provide clinical services to end consumers, hence the “private” nature of the payment method. Companies that adopt this model are often characterized by having a large number or small laboratories that take “walk-in” customers to undertake a full range of clinical tests, medical check ups, and health screenings without having to go through a medical institution. The testing and results are conducted in individual laboratories, hence adopting a decentralized model. Such a model is most prevalent in markets – such as Indonesia - with low regulatory restrictions, in which measures to ensure quality control is lower.

This health check-up clinic business model will eventually evolve into a centralized business model driven by economic and other external factors:

- Players desire to achieve economies of scale by consolidating repetitive medical testing activities into a central location
- Increasing GDP per capita and expenditures on healthcare allows players to consolidate albeit at geographical distances separating diffuse clinics
- Increasing demand for quality healthcare and higher degrees of regulations
- As the healthcare sector matures, the increased number of doctors and hospitals will encourage medical groups to develop their own in-house laboratory

### **Stage 2. Private-payment Centralized Laboratories (Central Lab Model)**

**Prevalent in mature markets, central labs work as an autonomous department in a medical group, and perform tests specifically for patients within the group**

Private-payment centralized laboratories are characterized as laboratories that are a distinct and autonomous department of a larger hospital or medical group, where laboratory tests are performed specifically for patients within the medical group. As a result, the patients are the eventual payers of the laboratory services, hence the “private” nature of the payment method. Such laboratories are considered higher quality as compared to decentralized laboratories due to greater quality control measures and standardized procedures set by the medical group.

The central laboratory business model, which is prevalent in more mature markets such as in Singapore and Korea, will eventually evolve into an independent laboratory model driven by the need for hospitals and healthcare providers to focus on core activities and hence outsource non-core activities. Transitioning from a central laboratory market to an independent laboratory market is driven primarily by the following:

- Mature healthcare markets will demand even greater quality, sophistication and specialisation of services from healthcare institutions. This will result in a need for healthcare groups to focus on core activities, and often laboratories are carved out as it makes more operational and financial sense to outsource the function to a third party
- Clinical laboratories independent from a larger medical group are able to benefit from a larger pool of institutions to work with, ensuring a greater flow of tests to perform

### **Stage 3. Third-party payment Centralized Clinical Laboratories (Independent Lab Model)**

**In advanced markets, independent labs conduct laboratory tests and assessments for medical institutions, general**

A third-party payment centralised clinical laboratory is an independent institution that is exclusively responsible for laboratory testing, conducting laboratory assessments and compiling laboratory test reports for various medical institutions, general practitioners, corporations and insurance companies. Tests are typically conducted from one or a few central laboratories, from which the results are sent back to the institutions where

**practitioners, corporations and insurance companies that outsource their laboratory testing**

diagnosis and treatment of patients are performed. The “third-party” nature of the payment method is derived from the following:

1. Patients undertake testing through hospitals, GPs, or insurance companies, whereby samples are then sent to the independent laboratory. It is these hospitals, GPs and insurance companies that are the eventual payers of the tests conducted at the laboratory based on a pre-agreement between the two parties.
2. Patients that are covered by a social insurance programme such as Medicare enjoy fully paid for or subsidized laboratory services. In such cases, the laboratories are paid by the insurer.

Laboratories with links to such institutions usually have a number of long-term, often exclusive partnerships to conduct the processing of its tests. Such partnerships are particularly beneficial for the institutions as it provides them with greater quality control and reliability. In turn, clinical laboratories receive a steady stream of tests to process, and in an era in which demand for healthcare has been increasing, they also benefit from the prospect of a greater flow of business. Independent laboratories are most prevalent in developed markets, and can be seen in the US and Europe.

Furthermore, the benefits of running an independent centralized laboratory, as well as working with one, includes:

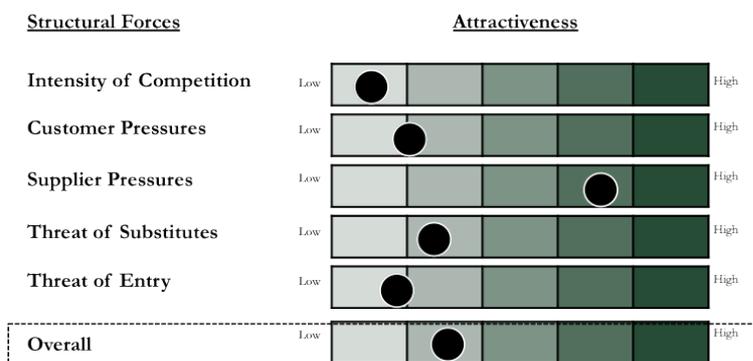
- Ability to create comparable lab results because of standardized methodologies
- Quality: Data can be requested to be presented in the format of the client’s requirements. Errors are also minimized due to greater quality control measures.
- Speed: Shorter delay time
- Reduced costs: Due to the high number of tests conducted by the laboratory, economies of scale can be achieved and is also passed on to the client.

**Attractiveness and Potential Buyout Opportunities**

Based on the analysis of the various business models within the industry, the attractiveness of each business model increases as the industry evolves into an independent laboratory model. As illustrated in the figures below, the attractiveness of each phase of a clinical laboratory’s evolutionary path is highlighted based on fundamental changes in the driving forces that affect the dynamics of the industry. This provides key implications to the types of buyout opportunities that can be attractive for buyout opportunities.

**Acquisition Theme 1: Identify leader in the diffuse lab market or roll up smaller players**

The private payment decentralized model is highly competitive and fragmented, resulting in a lack of differentiability among players, and as such customers have greater bargaining power thereby leading towards a trend of lowering prices. Furthermore, low initial capital investment requirements and relatively commoditized testing services result in low barriers to entry, allowing for new entrants to further saturate the market.



In this business model, the main critical success factor is a company’s geographical reach

and number of clinics. Achieving this allows the company to have a greater number of patients, and ultimately will enable the company to fend off its competitors who are unable to achieve scale.

=> **Implications for Buyouts:** Overall, we believe this theme to be attractive. This type of market such as in Indonesia is much more fragmented as compared to laboratories with contracts with medical institutions. Therefore, the attractiveness of a buyout can be realised through two methods:

1. Identify market leader who can best exploit the benefits of economies of scale but also possesses key capabilities that will enable it to transform to the next form of business model: a centralized or independent lab. The key capabilities that these leaders must possess are (i) strong network of relationships with hospitals and government healthcare regulators, (ii) operational process management capabilities, and (iii) strategic and change management leadership capabilities.
2. Roll up several small players each having a handful of labs. Typically these players do not have enough scale to have any substantial bargaining power, nor do they have the management capabilities to grow their business. As such, the consolidation of small players will allow us to (i) enter at attractive low valuations, (ii) maximise greater value creation opportunities, (iii) and realise potential multiple expansion as the enterprise value of the group substantially increases.

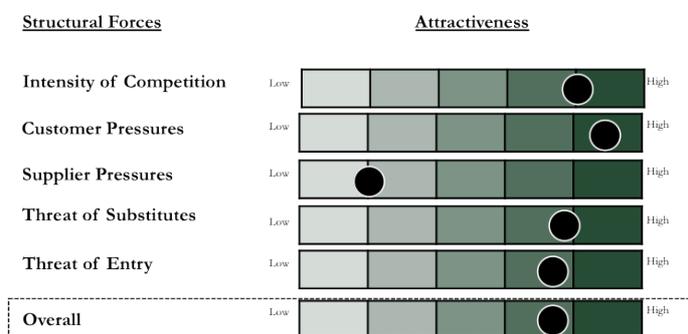
**Acquisition Theme 2: Carve out of Central Laboratories with strong operational and management capabilities**

As a result of medical groups selling off non-core assets, opportunities exist in carving out clinical laboratories from medical groups. Such a scenario will relieve the seller from financial and operational burdens, while the buyer can acquire an already established and reputable clinical laboratory.

=>**Implications on Buyouts:** We believe this theme to be attractive in identifying buyout opportunities. Although the clinical laboratories will already have an established reputation and quality standards, an attractive buyout opportunity will only exist in laboratories with strong operational and management capabilities to be able to transition the laboratory from a central lab to an independent lab.

**Acquisition Theme 3: Identify leaders in the independent lab market**

Established independent clinical laboratories have strong bargaining power over its customers and suppliers, ensuring that the best laboratories can achieve strong and sustainability margins. The relatively low levels of competition and low threat of substitutes such as diffuse and central labs makes independent labs ideal candidates for buyouts.



=>**Implications of Buyouts:** We believe this theme is highly attractive due to the high barriers to entry and lucrative contracts that independent clinical laboratories can establish with medical institutions.

**Figure 5. Summary of Buyout Attractiveness**

	<b>Diffuse Labs</b>	<b>Central Labs</b>	<b>Independent Labs</b>
<b>Common Markets</b>	Developing markets such as <u>Indonesia and Malaysia</u>	Markets reaching full maturity such as <u>Singapore and Korea</u>	Developed markets such as <u>USA and Europe</u>
<b>Intensity of Competition</b>	The highly fragmented nature of the industry leads to high competition based on price and location	Market occupied mainly by central labs from medical groups. Few independent and diffuse labs	Consolidated market with few large players with existing long-term contracts and relationships with hospitals  Clinics and hospitals tend to be captive relationships thereby reducing level of rivalry
<b>Customer Pressures</b>	Due to large number of choices among clinics and lack of differentiability among players, bargaining of clinics is relatively low thereby leading towards a trend of lowering prices	Patients tend to visit hospitals and are concerned about quality and reliability. As such, medical groups are able to charge higher prices for premium services	Patients tend to visit hospitals and are concerned about reliability  Hospitals focus on core activities and outsource non-core functions such as clinical labs  Few customers with long term contracts  Customers switching costs are high due to concerns on safety, reliability and regulatory
<b>Supplier Pressures</b>	Medical equipment and supplies for standard testing services are plentiful with many suppliers, thereby allowing for clinics to bargain for lower supply costs	Medical equipment suppliers for standard testing services are plentiful, but more specialized equipment are less readily available and as such increases suppliers bargaining power	As testing becomes more sophisticated, the need for medical equipment and supplies becomes more specialized, leaving clinics with few alternative suppliers and thereby increasing switching costs
<b>Threat of Substitutes</b>	In-house and Independent laboratories are the main substitutes, and are typically more reputable and greater quality control  In developing markets, because of the higher prices charged, such hospitals and clinics may not represent an immediate threat	Few diffuse and independent labs to compete with, as such threat of low	In markets where independent labs are prevalent, hospitals are increasingly outsourcing this activity because of its non-core nature, and as such, threat of substitutes is low
<b>Threat of Entry</b>	Low initial capital investment requirements and relatively commoditized testing services allow for ease of entry	Low threat of entry as players are required to meet minimum standard of quality, and market is driven by quality players	Low threat of entry as market is dominated by large players
<b>Attractiveness for Buyouts</b>	 <p><b>Attractiveness increases as labs evolve from diffuse to independent models</b></p>		

Source: Houghton Street Partners Analysis

## IV Acquisition Leads

Based on the acquisition themes stated above, we have compiled a list of potential acquisition targets that can be considered for buyouts. The targets span three countries - Indonesia, Malaysia and Korea, thus covering two main business models namely the diffuse lab and central lab models. As leaders in their respective markets, the targets demonstrate strong transformational capabilities as they have elements of the independent lab business model – making them ideal buyout targets.

**Figure 6. Acquisition Targets Descriptions**

Priority	Name	Country	Year Est.	Description	Deal Rationale	Ownership	Financials
High	Prodia Clinical Laboratory	ID	1973	One of Southeast Asia's largest and most established clinical laboratories, with 112 branches and 4,000 employees across Indonesia. Largest player in Indonesia. Part of Prodia Group	Number 1 market leader in clinical lab market in Indonesia, internationally recognized. The company can be used as a consolidator or as a transformation play	100% Family owned	2012 Rev- US\$86m
High	BP Healthcare	MY	1982	One of Malaysia's largest chains of laboratories. Has diversified portfolio of healthcare services including hearing aid centres, pharmacies, testing centres, dental clinics, and eye clinics, treating more than 4 million patients a year	Leader in Malaysia with strong international reputation. Company adopts both a diffuse and independent lab model, making them an ideal target for transformation	Family owned	n.a.
Med	Pathlab	MY	1952	Malaysian-based clinical lab currently with over 70 laboratories located in Singapore, Malaysia, Thailand, Cambodia, Indonesia and Hong Kong. It is now in its second generation of ownership, and is a subsidiary of Kam Holdings	One of two large scale diffuse lab companies in Malaysia, making it an ideal candidate for transformation into an independent lab	Family Owned	(MY) Rev- RM70m (SG) Rev- SG\$12m
Med	Clinipath	MY	1996	Clinipath was established in 1996 and has since extended a network of 20 branches across Malaysia. The company serves mostly corporate clients, hospitals, GPs and insurance companies who outsource their laboratory activities.	For roll up of small scale diffuse labs	Malaysia Genomics Research Center Berhad and Qualitas Healthcare	2010 – Rev RM20m
Med	Gribbles Pathology Malaysia	MY	1996	Gribbles Pathology Malaysia is one of the largest private provider of diagnostic laboratory services in the region. In 2004, Gribbles group was acquired by The Healthscope Group, a portfolio company of the Carlyle Group and TPG Capital	Largest Independent laboratory in Malaysia. Ideal for platform for roll up	Carlyle Group & TPG Capital	Rev - RM80m
Med	Pramita Clinical Laboratory	ID	1987	Operates 15 diffuse lab centers	For roll up of small scale diffuse labs	Owned by Founder	n.a.
Med	Parahita Clinical Laboratory	ID	2007	Operates 17 diffuse lab centers, making them one of the larger players in Indonesia. Was a spin off of Pramita Clinical Laboratory in 2007 after the founders decided to split	For roll up of small scale diffuse labs	Owned by Founder	n.a.
Med	Utama Clinical Laboratory (Biotest)	ID	1980	Operates 8 diffuse lab centers and is currently in its second generation of management. Founders are from the prominent Surjandaja Family, who are also founders of CIMB Niaga Bank.	For roll up of small scale diffuse labs	Family Owned	n.a.
Low	Baek Hospital (carve out of clinical lab)	KO					n.a.

Source: Houghton Street Partners Analysis

## Acquisition Target Profile: BP Healthcare

### Summary

#### Founded

1982

#### Ownership

It appears to be fully owned by the Beh family (founders), however it is unknown if there is any third party ownership

#### Country of Origin

Malaysia

#### Financials

	2012
Sales	n.a.
EBITDA	n.a.
NPAT	n.a.
Debt/Equity Ratio	n.a.
# of Employees	800
Patient Episodes per day	3,000

#### Key Management Team

Ms. Lovy Beh – Group Managing Director  
Mr. Chevy Beh – Group Managing Director  
Dr. Tan Kia Gin – Chief Medical Officer  
Ms. Ho Pooi Yee – Director of Business Development  
Mr. Albert Beh Chun Lian – Director of Public Relations  
Dato' Yew Cheng Hoe - Director of Public Relations  
Dato' Haji Roshidi Bin Haji Hashim – Chairman

#### Corporate Overview

BP healthcare was established in 1982 by Dato Beh Chun Chuan after he bought out a laboratory from his employer and took full control. Since then it has become one of Malaysia's largest integrated private healthcare providers, with core strengths in diagnostics, clinical laboratories and medical technologies. The company is now in its second generation of management. After Dato Beh Chun Chuan became chairman, operations of the company was passed on to his children, with his eldest son Chevy Beh leading the management team.

The BP Healthcare group of companies comprises of:

BP Clinical Lab	BP Pharmacy	BP Food Testing	Labpro
BP Diagnostic Center	Lovy Pharmacy	BP Environmental and Industrial Testing	Garvy's
BP Specialist Center	BP Aesthetic	BP Wellness Center	BP Polo
BP Dental	BP Eye	BP Business Solutions	Hospital Pantai Ipoh
BP Radiology	BP Hearing Solutions	BP Ambulatory	

In 2012, BP Healthcare entered into a 50-50 joint venture with Indonesian property giants Ciputra Group with the aims to establish 100 medical diagnostic centers across Indonesia by 2015. They have also entered into an agreement with Red Bull International to expand its operations into Thailand, with aims to open 50 outlets by 2015. The names of the companies in Indonesia and Thailand are Ciputra BP Healthcare and BP Healthcare Thailand respectively.

#### Investment Rationale

##### 1. Integrated healthcare player, but with core capabilities in clinical laboratories and diagnostics

As a leader in healthcare in Malaysia, each of BP's group of companies are able to leverage off each other's strengths and capabilities. However, the company's core strengths are in its clinical laboratory and diagnostics companies.

##### 2. Strong local and global reputation and recognition

Largest chain of laboratories in Malaysia with over 35 million patients a year  
First laboratory in Asia to achieve JCI accreditation and first locally owned Malaysian laboratory to achieve ISO 15189 accreditation  
Winner of international awards from reputable organizations such as Frost & Sullivan, Best Brand, The Star and Super Brand  
Entered into joint ventures with two highly respected organizations in Indonesia and Thailand, namely Ciputra Group and Red Bull International

##### 3. Strong Management team with medical, business and operational capabilities

The company is now in its second generation of management after founder Dato' Beh Chun Chuan recruited four of his children to take control of the company. They have backgrounds in various fields including pharmacy, investment banking and economics. Since joining the company, BP has been able to meet its aggressive expansion targets both locally and internationally, as well as win numerous awards on both individual and company levels.

##### 4. Operates as independent laboratory for medical institutions and corporations

Along with operating diffuse labs, BP also serves as an independent laboratory for medical institutions, general practitioners and corporations, thereby reducing transformational risk.

#### Background on the Beh Family

Dato Beh Chun Chuan and his wife, Datin Poh Lay See founded BP Healthcare Group in 1982. Dato Beh Chun Chuan is currently the Chairman of BP Healthcare Group. He was a past committee member of Perak Chinese Maternity Hospital and the founder and past President of Malaysian Association of Private Medical Laboratories. He also has private investments in Shan San Ling Holding Sdn Bhd, Kinta Valley Resort Sdn Bhd and Sunway City (Ipoh) Sdn Bhd. Dato Beh Chun Chuan, 58 has three sons, Dato Chevy Beh, 29, Joevy Beh, 24, Garvy Beh, 20 and a daughter, Lovy Beh.

Dato Chevy Beh is currently the Group Executive Director of BP Healthcare and Founder of BP Dental Sdn Bhd. He is also a Co-Founder and Principal at Compradore Capital, LLC, a private equity firm and the Founder and Partner of Max Healthcare (Thailand) Pte Ltd. He also serves as Directors of Hospital Pantai, Ipoh and Sunway City (Ipoh) Group. Dato Chevy Beh was previously a China-focused analyst at the Maxim Group, an investment bank based in New York after graduating from University of Virginia with double major in Economics and East Asian Studies.

Joevy Beh is the Founder of BP Environmental Testing, BP Hearing Solutions and BP Healthcare (International). He is also the Chairman of BP Healthcare (International), responsible for overseas investment. He graduated from University of Virginia with a BA in Economics and Anthropology. Prior to joining BP Healthcare, Joevy was an analyst at Chartis in New York and in the Marketing and Compliance Department in Acadian Asset Management in Boston.

Ms. Lovy Beh is the Founder of Lovy Pharmacy and Director of BP Pharmacy, BP Wellness Centre and BP Business Solutions. She is the Deputy President of Malaysian Community Pharmacy Guild (MCPG) and is a registered pharmacist in the UK, Singapore and Malaysia. She graduated from London School of Pharmacy with a Master in Pharmacy.

Garvy Beh is currently studying in University of Virginia and will be graduating this year. He founded Garvy's Sdn Bhd, a restaurant during summer holiday and continues to manage the business via virtual management.

#### **Viability of Buyout**

---

Despite the company's plans to expand aggressively over the next few years, it is unclear as to whether the company requires external funding due to the family's wealth and background.

## Acquisition Target Profile: Prodia Clinical Laboratory

### Summary

#### Founded

1973

#### Ownership

Owned by 4 founder families including:

1. Andi Wijaya (Chairman of the board)
2. Gunawan Prawira (Board Member)
3. Hamdono Widjojo (Board Member)
4. (The Late) Singgih Hidayat

Andi Wijaya expressed interest in a 2010 interview in bringing the company for IPO at some point

#### Corporate Structure

Prodia Clinical Laboratory (or Laboratorium Klinik Prodia) sits within PT Prodia Widyahusada, one of the six subsidiaries of Prodia Group

The other subsidiaries include

1. PT. Prodia Diacro Laboratories (CRO)
2. PT. Prodia Occupational Health Institute International
3. PT. Prodia Stemlife Indonesia (Stemcell Banking)
4. PT. Prodia Diagnostic Line (Industrial Regents). Partial shares sold to DiaSys Diagnostic System and Guenther Jans. Prodia's status now is a company with foreign direct investment (PMA)
5. Works Manunggal Lithomas – Printing solutions company which does cards, certificates, brochures, booklets, flyers, etc.

#### Corporate Overview

Prodia Group, through its business unit Prodia Clinical Laboratory (Laboratorium Klinik Prodia), runs one of the largest and best clinical laboratories in Asia, providing a wide range of laboratory testing services.

Prodia was the first clinical laboratory in Indonesia to meet with ISO 9001 & ISO 15189 standards, and recently obtained certification from the National Glycohemoglobin Standardization Program (NGSP) Level 1 for HbA1c standardization, and accreditation by the College of American Pathologists.

It has received awards as a National Top Brand for four consecutive years since 2009, and owns a network of 112 branches nationwide in 29 provinces and 96 cities to cover patient sampling at any needed site in the country. It has been working in the clinical trial area for nearly 15 years, and later established a sister CRO company.

The company offers services in clinical laboratory services, examination support, health screenings, research & clinical trials, and children's laboratory services.

#### Investment Rationale

##### 1. Broad Menu of Laboratory Tests:

Ability to analyze more than 500 kinds of tests, from routine standard safety testing to esoteric testing, with sophisticated methods (ElectroImmuno Chemiluminescent Assay/ ECLIA, Chemiluminescent Microparticle Immuno Assay/ CMIA, Microparticle Enzyme Immuno Assay/ MEIA, Fluorescence Polarization Immuno Assay/ FPIA, HPLC, RT-PCR and more), including:

Routine Tests	Specialized Tests	Other Tests
Hematology, coagulation, clinical chemistry, urine and feces, molecular, osteoporosis	Tumor marker, endocrinology, microbiology, CSF analysis	Prodia collaborates with Specialty Laboratory (Santa Monica, USA) and NUH Reference Lab (Singapore) for access to the latest assays and technology currently available, while increasing the number of tests Prodia is able to analyze through its R&D activities

##### 2. Rapid Turn Around Time

Prodia achieves extremely rapid turn around time by implementing the latest generation instruments with high throughput. Prodia is supported by an integrated system through Laboratory Information System (LIS) and laboratory Automation System (LAS). All specimens performed in Prodia will be directly analyzed after arrival in the laboratory and results will be reported within 24 hours by means of fax, airmail or email.

##### 3. Reliable Specimen Storage and Flexible Logistics

**Specimen Storage** - Prodia's repository services provide both long-term and short-term specimen storage under optimal conditions for specimen integrity. Prodia maintains specimens at -20oC and -70oC for bank serum, genomic DNA, PK samples, etc. The controlled storage environment has an on-site backup system in case of disruption of electrical service.

**Flexible Logistics** - Preparation, packaging, and delivery of all supplies and materials necessary for specimen collection are managed within the laboratory. Having close cooperation with major courier services allow it to supply trial sites with sampling materials that comply with current International Air Transport

---

Regulations (IATA compliant) and thereby guarantees proper transport conditions. Materials can either be provided as visit-specific kits or as generic supplies, remaining convenient and easy to use.

**4. Largest branch network in Indonesia**

250, including 112 branches and 138 network outlets within partner clinics

Organized into 8 regions:

Region I (Aceh and North Sumatra)	Region V (Central Java)
Region II (West Sumatra, Riau, Jambi, Bangka & Belitung)	Region VI (East Java and Bali)
Region III (Jabodetabek)	Region VII (Kalimantan)
Region IV (West Java)	Region VIII (Eastern Indonesia)

**5. Very low debt ratio**

According to the Prodia founder, capital requirements for expansion are mostly internally funded.

**6. Run by professional managers, rather than founder family members**

Prodia founder believes that building a high-performing team is one that is tough, compact and professional. He is of the view that by establishing a good system that is not leader-dependent, the company will continue to operate and perform well without him. Hence he has passed over the reigns of the company to be managed by professional staff since 2001.

**7. Strong international reputation evidenced by accreditation and partnerships**

Obtained ISO 9001 & ISO 15189 standards, National Glycohemoglobin Standardization Program (NGSP) Level 1 certification for HbA1c standardization, and accreditation by the College of American Pathologists (only one in Indonesia with CAP accreditation).

Secured 2-year alliance with international CRO Quintiles to provide Central Lab Testing Solution in Indonesia, resulting in the launch of the first global trial involving Indonesia for diabetes in 2011.

**8. Strong local branding**

Awards obtained by Prodia in 2012 include the Excellent Service Award, Corporate Image Award, Top Indonesia Original Brands, and Top Brand Award (2009-2013) for the category of laboratory.

## Acquisition Target Profile: Pathlab

### Summary

#### Founded

1952

#### Ownership

It appears to be fully owned by Kam Holdings (Kam family), however it is unclear if there is any third party ownership

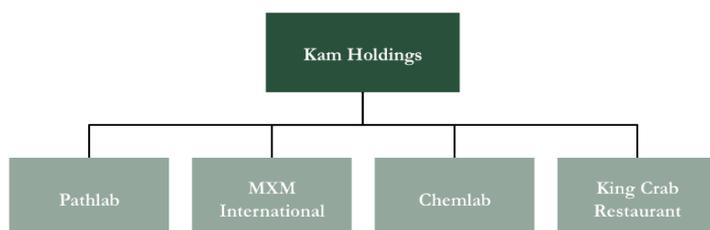
#### Country of Origin

HQ in Malaysia, branches in Singapore, Indonesia, Cambodia, Thailand, Hong Kong

#### Financials

	2012
Sales	MY- RM70m SG- SG\$12m
EBITDA	n.a.
NPAT	RM5.5m(2007)
Debt/Equity Ratio	n.a.
# of Employees	n.a.
Patient Episodes per day	3,000

#### Corporate Structure



#### Key Management Team

Kam Kok Fei, Marcus (Group President and CEO)

Sylvia Koh (Senior Corporate Affairs Manager)

Sam Tang (General Manager)

#### Corporate Overview

Pathlab was established in Singapore by Dato Kam Foon Wing in 1952. It has since moved its headquarters to Malaysia, where over 40 of their laboratories are located. It currently has over 70 laboratories located in Singapore, Malaysia, Thailand, Cambodia, Indonesia and Hong Kong. It is now in its second generation of ownership, with son Marcus Kam and his wife Sylvia Koh taking over the business.

The company is a subsidiary of Kam Holdings, which is also the parent company of MXM International, a leading health insurance company in Malaysia with branches across Southeast Asia. MXM is uniquely positioned in the health insurance industry by integrating Pathlab's clinical laboratory expertise into its products by combining insurance and health screenings, and a result reducing health plan costs to its customers. In turn, Pathlab has been able to benefit from this partnership by achieving economies of scale through a steady stream of patients.

#### Investment Rationale

##### 1. Gaining International Recognition

Awarded MS ISO 15189 Accreditation.

##### 2. Strong geographical footprint across Southeast Asia and Hong Kong

Pathlab has operations in six countries, allowing for greater scalability and cross-border partnerships with overseas companies.

##### 3. One of few large-scale "diffuse lab" model companies in Malaysia

Along with BP, Pathlab is one of the largest "diffuse lab" model clinical laboratories with over 40 labs in Malaysia alone, and provides us with the opportunity to further grow the business by transforming it to an independent laboratory.

#### Viability of Buyout

Due to the partnership between MXM International and Pathlab, it is unclear whether Kam Holdings will want to sell off a core asset.

## Acquisition Target Profile: Clinipath

### Summary

#### Founded

1996

#### Ownership

95% owned by Malaysia Genomics Resource Centre (MGRC) through its subsidiary, MPath.

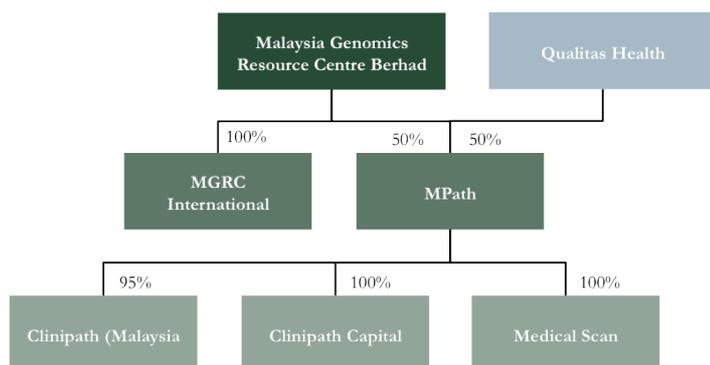
#### Country of Origin

Malaysia

#### Financials

	2010
Sales	RM 20m
EBITDA	n.a.
NPAT	RM616,000
Net Assets	RM4.7m
# of Employees	150 (in head quarters)
Patient Episodes per day	n.a.

### Corporate Structure (as of December 2013)



### Corporate Overview

Clinipath was established in 1996 and has since extended a network of 20 branches across Malaysia. The company serves mostly corporate clients, hospitals, GPs and insurance companies who outsource their laboratory activities.

The majority shareholders of the company are the Malaysia Genomics Resource centre (“MGRC”), a public company providing genome sequencing & analysis, and genetic screening services, and Qualitas Health, a primary healthcare provider. The two companies went into a 50:50 joint venture in 2012 to establish MPath, which has a 95% stake in Clinipath.

### Investment Rationale

#### 1. Gaining International Recognition

Awarded MS ISO 15189 accreditation in 2010

#### 2. Provides opportunity for a roll-up

As one of the leading *small-scale* independent clinical laboratories in Malaysia, Clinipath can be an ideal platform for the roll-up of small independent labs in Malaysia. As value investors, there are numerous value-add initiatives we can undertake with smaller, less established players through various operational, technical and accounting improvements. This may not be the case with larger players.

#### 3. Ample room for Growth

After Gribbles, it appears that Clinipath is one of the most established clinical labs in Malaysia that adopts the independent lab model. Along with roll-up opportunities, Clinipath may also present investors with an attractive company for organic growth given their relatively small size as compared to Gribbles. This allows for a large room for growth, providing ample value add opportunities for investors.

### Viability of Buyout

Currently, it is unclear whether Clinipath is considered a core asset for MCRC and Qualitas Health.

## Acquisition Target Profile: Gribbles Pathology (Malaysia)

### Summary

#### Founded

1936 in Australia  
Operations in Malaysia commenced in 1996

#### Ownership

100% owned by Healthscope Group

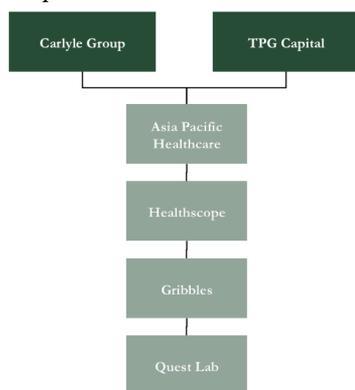
#### Country of Origin

Malaysia

#### Financials

	2012
Sales	RM 80m
EBITDA	
NPAT	RM 20m
Net Assets	
# of Employees	500+
Patient Episodes per day	c. 5,500

#### Corporate Structure



#### Key Management Team

Sambantha Moorthy (CEO)  
Datin Dr. G. Duraisamy (Consultant Haematologist)  
Prof Dr. Leslie Lai Chin Loy (Consultant Biochemist)  
Assoc. Prof. Dr. Cheong Yuet Meng (Consultant Microbiologist)  
Dr. Siva Das Thuraisingham (Medical Director/Consultant Pathologist)  
Dr. Bhanumathy Pillay (Consultant Pathologist)  
Dr. Sophia Marilyn George (Consultant Pathologist)  
Dr. Madhavan Manoharan (MIAC Consultant Pathologist)

### Corporate Overview

Gribbles Pathology Malaysia commenced operations in 1996 and is now the largest private provider of diagnostic laboratory services in the region. The company is headquartered in Petaling Jaya, employs 500 staff nationwide and have an established network of 37 pathology facilities throughout Malaysia, Sabah and Sarawak. Currently Gribbles Malaysia performs tests for over 1.5 million patients per year, and provides medical testing in all disciplines to over 10,000 Medical Practitioners, Hospitals and Corporate Clients.

The company is part of Gribbles Group, an Australian-based pathology group established in 1936 employing over 2,000 employees in over 40 laboratories throughout Australia. In 2004, Gribbles group was acquired by The Healthscope Group, a leading private healthcare operator within Australia and is the second largest private hospital provider with 43 hospitals under management. In 2010, Healthscope Group was acquired by Asia Pacific Healthcare Group, a company owned by funds advised and managed by the Carlyle Group and TPG Capital.

#### Investment Rationale

##### 1. Undoubtedly the largest provider of laboratory services in Malaysia

The company conducts over 1.5 million patient episodes per year and serves over 10,000 medical practitioners, hospitals and corporations in Malaysia.

##### 2. Backed by strong team with established reputation in healthcare

As a subsidiary of Healthscope, Australia's second largest private hospital provider, Gribbles is backed by a strong team of experts in the healthcare sector, ensuring greater quality standards and knowledge transfer between the two entities.

##### 3. Potential for further operational improvements through downsizing of laboratories

There appears to be an opportunity for us to add value to increase the overall efficiency and productivity of the company by implementing leaner operations. Currently, Gribbles operates 24 central laboratories across Malaysia. However, running as many laboratories may be unnecessary, thereby providing us the opportunity to downsizing the number of laboratories, resulting in a decrease in costs and increasing the utilization and efficiency of each of the remaining laboratories.

#### Viability of Buyout

As Healthscope's main business is in the running of private hospitals, there may be an opportunity for us to acquire Gribbles as it is a non-core asset. This will allow Healthscope to focus more on its core strength.

## Acquisition Target Profile: Laboratorium Klinik Pramita

### Summary

#### Founded

October 1987 by Mr. Sarno Eryanto, Drs. H. Moh. Sulthon Amien, & third investor from Malang named Utoyo (Public information on Utoyo is unavailable)

#### Country of Origin

Indonesia

#### Ownership

Mr. Sarno Eryanto (54)

Previously co-owned with two other founding partners who have since divested their shares

#### Financials

	2010
Sales	
EBITDA	
NPAT	
Net Assets	
# of Employees	800+
Patient Episodes per day	

#### Affiliated Companies:

**Parahita Diagnostic Center** – Was spun-off from Pramita in 2007 after the two founders decided to split. It is now a separate company run by Drs. H. Moh. Sulthon Amien

### Corporate Overview

Current owner Mr. Sarno Eryanto (“Sarno”) previously founded “Lab Klinika” in Surabaya in 1985 with seven friends he knew from Universitas Airlangga where they obtained their diplomas as medical analysts, and who each put in Rp 500,000, in total raising Rp 8m. Within two years the company paid out dividends of Rp500,000 to each shareholder, and the success of the company led to internal problems as the founders each wanted a directorship. Furthermore, one of the directors also misused company funds.

Sarno left the company and founded “Lab Citra” (Later renamed “Lab Pramita”) with Dr. H. Moh Sulthon Amien (“Sulthon”), his religious teacher, and a third investor named Utoyo in early 1987 with a start up cost of Rp7m, with each founder putting in Rp2m.

In 2007, Sarno and Sulthon decided to split for reasons unclear to us, with Sulthon taking five out of Pramita’s 10 centers and rebranding it to Parahita Diagnostic Center (“Parahita”). It is unclear what happened to Utoyo’s shareholdings.

Sarno continued to rebuild Pramita’s branch network, and added 10 more branches in three years. As of July 2010, Pramita had 15 centers located in Surabaya, Jakarta, Bandung, Cirebon, Medan, Yogyakarta, Palembang, and Semarang.

#### Services Offered:

1. Clinical Laboratory services
2. Examination support
3. Health screenings

### Investment Rationale

#### 1. Gaining international recognition

Since 2004, Pramita was awarded the ISO 9001:2008, SNI ISO 15189:2009 (Specific to medical laboratories) quality management system, ensuring management excellence and tight quality control measures.

#### 2. Relatively strong local brand strength

2011-2013: Top Brand (awarded by Frontier Consulting Group) runner up, second to Prodia for the category of Laboratories. The award is based on 1) top of mind, 2) last usage and 3) future intention.

#### 3. Focus on customer innovations

- Clinics are designed to be plush and comfortable, giving customers feeling of exclusivity
- First clinical laboratory in Indonesia to start opening at 6am daily. Other companies including Prodia soon followed.
- Results of tests can be conveniently obtained online, by SMS, or by e-mail.

#### 4. High quality medical personnel

Pramita has a strict hiring policy, selecting staff with the best educational qualifications. New recruits are given a three month probation to ensure that they have the necessary abilities, maturity and social skills. In 2010, of their 800 staff members, 85% were medical personnel.

Pramita recruits top medical analysts from other clinical laboratories. To ensure they get the best talent, they are willing to give salaries up to 50% more than their competitors.

#### 5. Effective use of latest technology and automation to improve speed and accuracy of tests

Pramita uses the latest medical equipment from the US, Germany and Japan such as 4D ultrasonography and 650mA capacity X-Ray Generators. The equipment is all interconnected by a computerised system that collects data with minimal operator intervention, increasing speed and accuracy of results.

## Investment Risks

---

### 1. Partner Risk

Sarno has been unable to hold down long term working relationships with his partners, as demonstrated in the two break ups he has had with partners.

### 2. Expansion Challenges

In 2007, Pramita divested five out of 10 centers. Between 2007 and 2010, Pramita's centers grew from five to 15. Following the divestment in 2007, Sarno was quoted saying that he plans to open four centers a year. Between 2007 and 2010, he opened three stores a year. Further due diligence is required to understand why there seems to be no center expansion since 2010. One possibility could be the lack of expansion capital, as Sarno was quoted saying it costs c. Rp 25b to open one branch – Rp15b for the facility and Rp10b for equipment. (Lab equipment costs between Rp500m to Rp2.5b per unit).

## Background Information on Sarno Eryanto

---

Sarno worked at a pharmacy and was eventually promoted to assistant pharmacist. During this time he developed relationships with doctors, with one of them recommending that Sarno attend Universitas Airlangga where Sarno earned his diploma in Medical Analytics in 1983.

---

## Acquisition Target Profile: Laboratorium Klinik Parahita

### Summary

#### Founded

2007

#### Country of Origin

Indonesia

#### Ownership

Drs. H. Moh. Sulthon Amien (56)

#### Financials

	2013
Sales	n.a.
EBITDA	n.a.
NPAT	n.a.
Net Assets	n.a.
# of Employees	n.a.
# of centers	17

#### Corporate Structure

**PT. Cita Mulia** (There is no public information on this company)

### Corporate Overview

Drs. H. Moh. Sulthon Amien (“Sulthon”) was the co-founder of Laboratorium Klinik Pramita (“Pramita”) in 1987 with Mr. Sarno Eryanto (“Sarno”). In 2007, the founders decided to split for reasons unclear to us, with Sulthon taking five out of Pramita’s 10 centers, which were rebranded Parahita Diagnostic Center (“Parahita”) The five centers were located in Surabaya, Bandung, Jakarta, Cirebon, and Medan.

As of 2013, Parahita has 17 centers located in 10 cities. (Surabaya, Makassar, Bekasi, Sidoarjo, Gresik, Jember, Solo, Bandung, Jakarta, Yogyakarta)

The company is involved with various CSR initiatives for the community, including donations, scholarships, natural disaster relief, blood drives and orphanage programmes.

Service offerings:

1. Clinical Laboratory Services
2. Examination support
3. Health screenings

### Investment Rationale

#### 1. Gaining international recognition

Obtained ISO 9001:2008 and ISO 15189:2007 (Specific to medical laboratories) accreditation, ensuring management excellence and tight quality control measures.

#### 2. Strong local mindshare in selected cities

Best of Surabaya Service Excellence Champion in the category of Clinical Laboratories by MarkPlus  
Bandung Service Excellence Champion in the category of Clinical Laboratories by MarkPlus  
Solo Service Excellence Award Champion in the category of Clinical Laboratories by MarkPlus

### Investment Risks

#### 1. Management is a one-man show with limited medical expertise

It is unclear to us whether Sulthon had any medical background when he founded the company. It is also unclear whether his wife Enny Sulthon, who has a background in pharmacy, is involved with the running of the company.

#### 2. Focus on CSR could interfere with profit motives

Parahita’s involvement with various CSR initiatives could have a long-term effect on the profitability and growth of the company, as it is unclear what the company’s main priorities are.

### Background Information on Dr. H. Moh. Sulthon Amien

Prior to founding Pramita, Sulthon was a chaplain and member of Muhammadiyah, Indonesia’s second largest Muslim organization with over 30 million members. He is now vice chairman of PW Muhammadiyah East Java.

Sulthon also founded Sekolah Alam Insan Mulia (SAIM), a Muslim school located in Surabaya.

### Viability of Buyout

Based on initial research, viability of buyout of Parahita may be limited due to the company’s involvement in various CSR initiatives for the community. Further consideration must also be made of Sulthon’s affiliation with various Muslim organizations if we decide to make an approach.

## Acquisition Target Profile: Laboratorium Klinik Utama (Biotest)

### Summary

#### Founded

November 1980 by Lelarati Surjaudaja and family

#### Ownership

Founded and owned by Lelarati Surjaudaja. Daughter Rukita Surjaudaja now manages the company

Based on family background and wealth, it is unclear whether they are open to a buyout or external investment

#### Related Companies

**OCBC NISP** (Formerly Bank NISP) – Indonesia's 4<sup>th</sup> oldest bank, founded by Lelarati Surjaudaja's (Chairperson) father, Lim Khe-Tjie in 1941

#### Country of Origin

Indonesia

#### Financials

	2013
Sales	
EBITDA	
NPAT	
Net Assets	
# of Employees	300 in Bandung Head office
# of centers	8

#### Key Management Team

1. Lelarati Surjaudaja (74)(Chairperson)
2. Rukita Surjaudaja (53) (Director)

### Corporate Overview

Biotest was founded in 1980 by Lelarati Surjaudaja. Karmaka Surjaudaja. Lelarati's husband was ill and was misdiagnosed at a lab. This led to the family wanting to start a lab that produced accurate results. The company was run by Lelarati, daughter Rukita (dentist and lecturer), daughter-in-law Anna Tjandrawati (Pathologist) and son-in-law Januar Sudarmono (Radiologist). Based on public information, it appears that neither Anna nor Januar are still at the company. The company started with 20 employees, and now having close to 300 at its head office in Bandung. The company now has eight centers in Bandung, Jakarta, and Surabaya.

#### Services Offered:

1. Clinical Laboratory services
2. Examination support

### Investment Rationale

#### 1. Strong reputation within the medical industry

12,000 medical doctors in Indonesia and 50 in Singapore have chosen to use Biotests services. Furthermore, it also has over a thousand corporate clients, ranging from national and international companies, including major state-owned enterprises.

#### 2. The company is managed by a medical practitioner

The company is managed by Rukita Surjaudaja, a dental practitioner and lecturer with extensive knowledge of the medical industry.

#### 3. Emphasis on quality and reliability

Biotest thrived due to its data reliability and on-time services. The company has emphasised the importance of quality of its services over aggressive expansion, and as a result has made a name for itself as a reputable lab.

#### 4. Gaining international accreditation

Awarded ISO 9001 for systems management – ensuring management excellence and tight quality control.

#### 5. Unique customized healthcare services

Biotest uniquely customises its medical packages based on the needs and characteristics of its patients. Such characteristics can be based on occupation, eating habits, hobbies, etc.

#### 6. One of few clinics to offer mobile lab services

In addition to on-site services, Biotest also offers mobile lab services in which customers can receive tests from the convenience of their own homes. One other company that offers this service is CITO Lab.

### Expansion

The company has not expanded aggressively because it prioritises high quality service above all else. Rukita has admitted that the company has plans for expansion and wants to open new centers. Although competition is fierce, she is confident of success because of the company's fast and accurate services, use of the latest equipment and international accreditation.

### Background Information on Surjaudaja Family

Lelarati Surjaudaja has been the Commissioner of OCBC NISP (Formerly Bank NISP) since 1982. She is also President director of PT Udayawira Utama and Director of PT Suryasono Sentosa. Her father, Lim-Khe-Tjie, founded Bank NISP in 1941, Indonesia's 4<sup>th</sup> oldest bank. OCBC became controlling shareholder through acquisition in 2004. OCBC now owns 85.06% stakes in Bank OCBC NISP.

Karmaka Surjaudaja was president director of OCBC NISP until 1997, and was succeeded by his son Pramukti Surjaudaja. Karmaka is now chairman emeritus of the bank.

Rukita Surjaudaja, Karmaka's daughter was a scholar at Padjadjaran University with a degree in dentistry. She is senior advisor of PT NISP Sekuritas, advisor of Bank OCBC NISP, and commissioner of PT Great Eastern Life Indonesia.

#### **Viability of Buyout**

---

Although the company is looking to expand in the near future, it is unclear whether they are open to a buyout or require external investment considering the family's background and wealth.

Figure 7. Notable M&A Transactions since 2005

Date	Target	Acquirer	Seller	Deal Type	Deal value (US\$m)	EV/ EBITDA	Target Country	Acquirer Country	Deal Description
26/09/13	German Laboratory Business	Sonic Healthcare Ltd	Labco SA	Strategic	102.4	n.a.	DE	AU	The acquisition of Labco's German laboratories is a significant step in Sonic's growth strategy for Germany. The transaction provides significant synergy and growth opportunity for Sonic
2/07/13	Constitution Medical Investors Inc	Roche Holding AG	Warburg Pincus LLC	Strategic	220	n.a.	US	SW	The acquisition will improve the hematology offerings of its Roche Diagnostics unit through CMI's Bloodhound Technology
7/01/13	Verinata Health Inc	Illumina Inc		Strategic	350	n.a.	US	US	BioReliance's global biopharmaceutical testing services will enable Sigma-Aldrich to build a specialized services platform that complements its existing products and technology strengths
9/01/12	BioReliance Corp	Sigma-Aldrich Corp	Avista Capital Partners	Strategic	350	n.a.	US	US	With completion of the acquisition, Illumina now has access to Verinata's verify prenatal test and to the most comprehensive intellectual property portfolio in the non-invasive prenatal test industry
24/02/11	Athena Diagnostics Inc	Quest Diagnostics Inc	Thermo Fisher Scientific Inc	Strategic	740	n.a.	US	US	The acquisition of Athena Diagnostics will establish Quest Diagnostics as the clear leader in the rapidly emerging esoteric and genetic neurological testing market. Athena will also complement Quest Diagnostics' existing leadership in testing for cancer, infectious disease and cardiovascular disease
24/01/11	Genoptix Inc	Novartis AG		Strategic	318.1	6.76x	US	SW	Medhold Group's presence in Belgium and the Netherlands is in line with Sonic Healthcare's plans for expansion in Western Europe
15/12/10	Labs D'Or	Fleury SA		Strategic	698.1	n.a.	BR	BR	The acquisition of Labs D'Or will help Fleury compete in Rio de Janeiro with Diagnosticos da America SA, Latin America's biggest diagnostics company by market value.
8/11/10	CBLPath Inc	Sonic Healthcare Ltd		Strategic	123.5	n.a.	US	AU	CBLPath will work closely with Sonic's clinical laboratory divisions to cross sell services to their respective referrer bases. Significant revenue synergies are expected to be realized from the cross sell opportunities in FY2012 and following years. In addition, there are a number of cost synergies which Sonic can offer CBLPath, particularly in the areas of logistics, purchasing and billing.
05/02/10	LGC Group Holdings	Bridgepoint Advisers	LGV Capital	Secondary	401.6	n.a.	UK	UK	Bridgepoint will support LGC's consolidation of the market as it begins to make focused acquisitions to build scale in the UK and internationally
30/08/10	MD1 Diagnosticos SA	Diagnosticos da America SA		Strategic	821.7	n.a.	BR	BR	
4/02/10	Medisch Labo D Van Waes CV	Sonic Healthcare Ltd	Waterland Private Equity Investments BV	Strategic	319.2	n.a.	BE	AU	
29/10/08	Biomnis	Duke Street Capital Ltd		Private Equity	279.9	n.a.	FR	UK	Post acquisition, Duke Street supported the company's expansion plans, and took advantage of regulatory changes to consolidate the French lab testing market through the synergistic acquisition of town laboratories.
23/07/08	Labco SA	CIC, Natixis, TCR Capital SAS, 3i Group PLC		Private Equity	314.1	n.a.	FR		The consortium plans on reinforcing Labco's market leadership in Europe as well as expanding to new markets through organic growth and acquisitions
30/06/08	Clinical Laboratories of Hawaii LLP	Sonic Healthcare Ltd		Strategic	118	6.2x	US	AU	The acquisition of Clinical Laboratories of Hawaii further expands Sonic's footprint in the US laboratory market place, and offers synergies with our existing operations in terms of purchasing, esoteric testing and sharing of best practice systems and laboratory protocols
20/03/08	Premier Research Group Ltd	ECI Partners LLP		Private Equity	155.9	8.66x	UK	UK	To gain a significant U.S. operational footprint, and expand its customer base
3/01/08	Apptec Laboratory Services Inc	WuXi PharmaTech Cayman Inc		Strategic	162.7	n.a.	US	CH	The acquisition of AppTec allows WuXi PharmaTech to immediately obtain biologics capabilities and expertise, gain a significant U.S. operational footprint, and expand its customer base and addressable market size. The combined business operations of WuXi PharmaTech to provide a full service suite of outsourced chemistry and biology services to global pharmaceutical, biotechnology and medical device clients
7/08/07	Unilabs SA	Apax Partners LLP		Private Equity	323.3	12.74x	SW	UK	Apax Partners merged Unilabs AB with its existing portfolio company, Capio AB, to create a leading diagnostics services group across Europe with over 100 laboratories combined.
16/11/06	Phadia AB	Cinven Ltd	Prudential PLC, Silverfleet Capital Partners LLP, Triton Advisers UK Ltd	Private Equity	1650.6	n.a.	SE	UK	Phadia has global market leadership in the in vitro allergy testing systems market, and Cinven plans to invest in accelerating top and bottom line growth through expansion of Phadia's global sales and marketing capabilities
5/10/06	MDS Diagnostic Services	Borealis Infrastructure Management Inc	Nordion Inc	Strategic	1175.5	n.a.	CA	CA	The sale of MDS Diagnostic Services enables MDS Inc to achieve its target focus purely on becoming a global life sciences company

29/06/06	Diagnostics Division	Siemens AG	Bayer AG	Strategic	5266.8	n.a.	DE	DE	The acquisition of Bayer Diagnostics is part of Siemens' targeted strategy to create the healthcare industry's first integrated diagnostics company by combining the entire imaging diagnostics, laboratory diagnostics and clinical IT value chain under one roof
8/08/05	LabOne Inc	Quest Diagnostics Inc		Strategic	869.9	12.79x	US	US	The acquisition of LabOne allows Quest Diagnostics to extract cost synergies, as well as expand into life insurance testing - an area in which it has not led the market

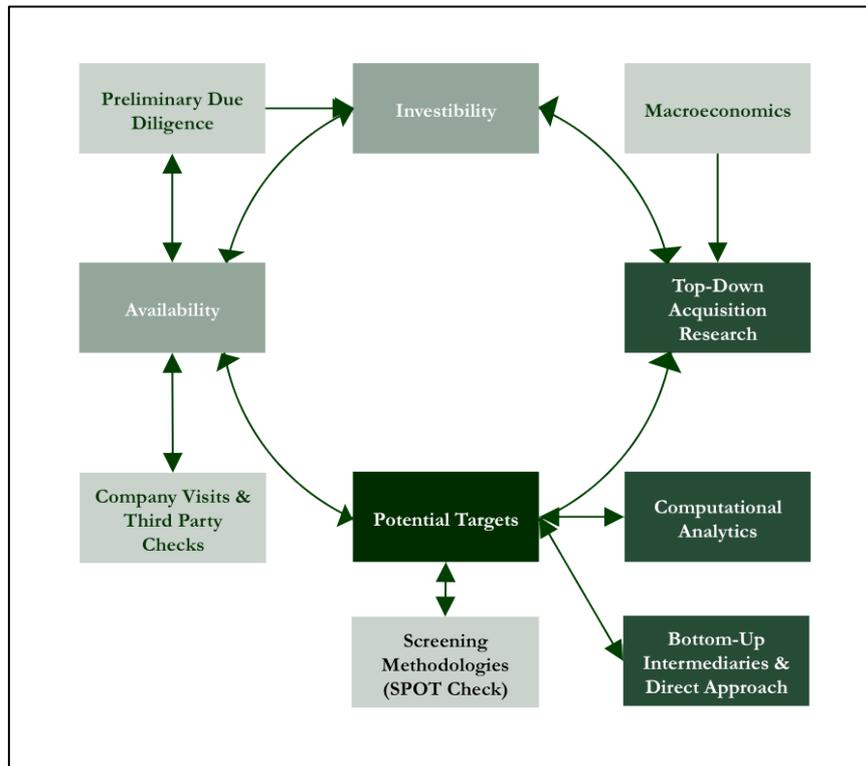
*Source: Bloomberg, Mergermarket*

**Figure 8: Comparable Analysis of top publicly listed Clinical Laboratory Companies**

Company	Country	Capitalisation		Key Financials T12M			Margins T12M (%)			Valuations				
		Market Cap	EV	Sales	EBITDA	EBIT	NPAT	EBITDA	EBIT	NPAT	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Laboratory Corp of America	United States	8,939	11,449	5,777	1,259	1,013	574	22%	18%	10%	2.x	9.1x	11.3x	16.1x
Quest Diagnostics Inc	United States	8,932	12,170	7,163	1,278	1,001	849	18%	14%	12%	1.7x	9.5x	12.2x	16.5x
Sonic Healthcare	Australia	6,017	7,586	3,517	623	493	335	18%	14%	10%	2.2x	12.2x	15.4x	19.4x
Idexx Laboratories	United States	5,422	5,556	1,343	324	267	188	24%	20%	14%	4.1x	17.2x	20.8x	30.7x
Primary Healthcare	Australia	2,288	3,189	1,493	395	294	150	26%	20%	10%	2.1x	8.1x	10.9x	16.4x
Genomic Health	United States	1,065	958	253	8	(12)	(13)	3%	-5%	-5%	3.8x	123.1x		
BML Inc	Japan	747		1,050	145			14%						15.9x
Sequenom Inc	United States	302	346	151	(101)	(113)	(117)	-67%	-75%	-78%	2.3x			
Neogenomics Inc	United States	172	175	63	7	1	0	10%	2%	0%	2.8x	26.6x	144.9x	117.3x
Capitol Health	Australia	168	170	63	7	5	4	12%	8%	6%	2.7x	22.7x	33.2x	43.3x
Enzo Biochem Inc	United States	100	94	94		(19)	(18)		-20%	-19%	1.x			
Isu Abxis	South Korea	83	93	7	(4)				-63%		13.9x			
Source Bioscience	United Kingdom	65	66	26	5	1	3	17%	4%	13%	2.5x	14.5x	57.6x	7.7x
Sapporo Clinical Laboratory	Japan	42	17	177	14			8%			.1x	1.2x		7.2x
Response Genetics Inc	United States	41	37	21		(8)	(8)	0%	-37%	-38%	1.8x			
Transgenomic Inc	United States	38	39	29		(10)	(8)	0%	-37%	-29%	1.4x			
General Biologic	Taiwan	38	35	6	1	(5)	15	12%	-88%		5.6x	45.2x		33.7x
<b>Harmonic Mean</b>								<b>13.2%</b>	<b>11.0%</b>	<b>8.3%</b>	<b>0.9x</b>	<b>7.5x</b>	<b>18.6x</b>	<b>16.6x</b>

Source: Bloomberg

## Proprietary SPOT Framework for origination



Houghton Street Partners' Acquisition Research is part of the company's proprietary Strategic Portfolio & Original Thinking Framework and is used to generate a list of potential targets. The targets have not been verified for "Availability" and "Investibility", and will form part of our company visits, third-party reference checks and further preliminary due diligence.

This page is intentionally left blank

**Warning:** By accepting this document, the recipient agrees to keep this document confidential and secure and is not permitted to disclose, distribute, copy or reproduce original information, extracts, derivative forms of such information, in whole or in part, to any other party without the prior written consent of Houghton Street Partners Private Limited (“Houghton Street Partners”). Should the recipient disagree to the above conditions, the recipient undertakes to immediately return this document and destroy all such related materials and provide a written certificate of destruction to Houghton Street Partners. By accepting this document, the recipient agrees that Houghton Street Partners shall be entitled to seek the remedies of injunction, specific performance or other equitable relief for any failure by the recipient to maintain the confidentiality of this document, provided that this sentence shall not prejudice any other remedies that Houghton Street Partners may have.

**Disclosure:** The content of this document should only be used for informational purposes and is intended solely for the person to whom it is delivered, and may not be reproduced or redistributed in any format without the prior written approval of Houghton Street Partners. In addition, you are not permitted to alter, obscure or remove any copyright, trademark or any other notices that are provided in connection with this document. This document is not, nor should be relied on in any manner as, tax, investment, legal, accounting or other advice, and does not constitute an offer to sell or a solicitation of an offer to buy any interest in Queen’s Gate Asia Fund L.P. (“The Fund”) or the securities mentioned in the document. This research is not an offer to sell or the solicitation of an offer to invest in any security or fund in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual readers. While care has been taken in preparing this material, Houghton Street Partners does not warrant or represent that the information, recommendations, opinions or conclusions contained in this document are accurate, reliable, complete or current. In all cases, anyone proposing to rely on or use the Information should independently verify and check the accuracy, completeness, reliability and suitability of the Information and should obtain independent and specific advice from appropriate professionals or experts. To the extent permissible by law, Houghton Street Partners shall not be liable for any errors, omissions, defects or misrepresentations in the Information or for any loss or damage suffered by persons who use or rely on such Information (including by reasons of negligence, negligent misstatement or otherwise). If you are not the intended recipient of this document, please return and destroy all information relating to this document immediately and provide us with a written response that this has been promptly executed. You agree that Houghton Street Partners will be able to rely on legal measures such as injunctions and equitable remedies to protect its rights with respect to this Important Notice. Houghton Street Partners reserves the right, at any time and from time to time, in the interests of its own editorial discretion and business judgment to add, modify, or remove any of the information. Should the recipient disagree to the above conditions, the recipient undertakes to immediately return this document and destroy all such related materials and provide a written certificate of destruction to Houghton Street Partners.

© 2014 Houghton Street Partners Private Limited. No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior written consent of Houghton Street Partners.